

MONTANA NATURAL HERITAGE PROGRAM
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PLANT SPECIES OF SPECIAL CONCERN
May, 1996

The Montana Natural Heritage Program (MTNHP) collects and compiles data on the elements of biological diversity in Montana, including plant species, animal species, plant communities, and other biological features that are known or suspected to be rare, endemic, disjunct, threatened, or endangered throughout their range or in Montana.

The attached list of 365 vascular plant taxa of special concern in Montana summarizes status and county distribution information currently known to MTNHP. This list has been developed from numerous sources, including: published and unpublished scientific literature; herbarium specimens; the Montana Rare Plant Project files (University of Montana); knowledgeable persons; and field research. This document is revised as new data become available.

Changes to the list since the most recent edition (Heidel 1995) are [highlighted](#) for quick reference, and include additions to the state flora. As a result of new information on distribution and numbers, some species have been deleted from the 1995 list; these appear on page 3. The publication "Sensitive, threatened and endangered vascular plants of Montana" (Lesica and Shelly 1991), available from MTNHP, provides supplemental details on the habitat, phenology, and distribution of many of these species. Comments, suggestions and supporting data are welcome concerning list content.

This vascular plant list is accompanied by a list of "watch" species (page 25), and a bryophyte list of 96 moss taxa of special concern (page 26), treated separately. Our information on the non-vascular flora in Montana is preliminary and, again, we welcome any comments with supporting data.

For additional information, contact MTNHP at the above address or via e-mail at mtnhp@nris.mt.gov. Electronic access to current list information and many other MTNHP data sets is available through the Internet via the World Wide Web at <http://nris.mt.gov>.

Explanation of Species of Special Concern List

G and S Ranks

Taxa are evaluated and ranked on the basis of their global (rangewide) status and their statewide status. A scale of 1 (critically imperiled) to 5 (demonstrably secure) is used for these ranks, and each species is assigned the appropriate combination of global and state ranks. Global and state ranks are assigned for vascular plants according to a standardized procedure used by all Natural Heritage Programs.

<u>Global/State Rank</u>	<u>Definition (G = Rangewide; S = Montana)</u>
G1 S1	Critically imperiled because of extreme rarity (5 or fewer occurrences, or very few remaining individuals), or because of some factor of its biology making it especially vulnerable to extinction.
G2 S2	Imperiled because of rarity (6 to 20 occurrences), or because of other factors demonstrably making it very vulnerable to extinction.
G3 S3	Vulnerable because of rarity (21 to 100 occurrences) or found in a restricted range (even abundantly at some of its locations) in a restricted range.
G4 S4	Apparently secure, though it may be quite rare in parts of its range, especially at the periphery.
G5 S5	Demonstrably secure, though it may be quite rare in parts of its range, especially at the periphery.
GU SU	Possibly in peril, but status uncertain; more information needed.
GH SH	Historically known only from records before 1951; may be rediscovered.

Other codes:

Q	Taxonomic questions or problems involved, more information needed; appended to the global rank.
T	Rank for a subspecific taxon (subspecies or variety); appended to the global rank for the full species.
HYB	Hybrid taxon that is recurrent on the landscape, regardless of degree of offspring sterility

* The number of records as used in assigning global and state ranks may be weighted based on relative degree of habitat threat, geographic distribution patterns, population size, and trends.

USFWS Status: The symbols in this column denote the categories defined in the U.S. Fish and Wildlife Service Notice of Review (1980, 1983, 1985, 1990, 1993, 1996) and indicate the status of a taxon under the federal Endangered Species Act of 1973. Categories are listed below:

- E Endangered (**none in Montana**).
- T Threatened (**two in Montana**).
- P Proposed E or T (**none in Montana**).
- C Candidate (Substantial information in U.S. Fish and Wildlife Service files on biological vulnerability to support proposals to list as endangered or threatened; **none in Montana**).

Note: The categories C2, 3B and 3C are no longer maintained by the USFWS.

USFS Status: Sensitive species designation is made by Region 1 of the U.S. Forest Service, most recently revised in 1994. Watch species designation is made by national forests. Sensitive species are plant species, subspecies or variety, for which the Regional Forester has determined there is a concern for population viability within the state, as evidenced by a significant current or predicted downward trend in populations or habitat. Sensitive plants are known to occur on national forest land. Watch species are either not known to occur on national forest land but predicted to occur there on the basis of suitable habitat, or known to occur on national forest land but with no immediate or predicted threats to population viability. Included with status information are recommendations for consideration as sensitive made at the 1995 Montana Rare Plant Conference, prefaced by the word "proposed."

BLM Status - Sensitive species designation is made by the Montana State Office of the Bureau of Land Management, as first made in 1996. Sensitive species are determined to be imperiled in at least part of their range and documented to occur on BLM lands. Watch species are either known to be imperiled and suspected to occur on BLM lands; suspected to be imperiled and documented on BLM lands; or needing further study for other reasons. The term 'dropped' refers to taxa previously considered for sensitive or watch status but which have been determined to be not imperiled.

County Distribution - Counties in which the species is documented to occur are listed in alphabetical order. County names are abbreviated to just the first four letters, e.g., Lewis & Clark County = LEWI.

Plants deleted from MTNHP Species of Special Concern List since 1995:

Astragalus platytropis
Carex luzulina var. *atropurpurea*
Carex torreyi
Castilleja longispica
Penstemon caryi

Nomenclatural changes in genus or species names may be misinterpreted as deletions; however, these changes have been highlighted, e.g., *Amerorchis rotundifolia* instead of *Orchis rotundifolia* and *Solidago ptarmicoides* instead of *Aster ptarmicoides*.

Selected references:

- Dorn, R. D. 1984. Vascular Plants of Montana. Mountain West Publishing, Cheyenne, WY. 276 pp.
- Lesica, P. and J. S. Shelly. 1991. Sensitive, threatened and endangered vascular plants of Montana. Montana Natural Heritage Program, Montana State Library, Helena, Montana. 88 pp.

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Heidel, B. L. 1996. Montana plant species of special concern. [Unpublished list.] Montana Natural Heritage Program, Helena. 31 pp.

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Species Name Common Name	Family	G & S Ranks	USF&WS Status	USFS Status	BLM Status	County Distribution
ADOXA MOSCHATELLINA MUSK-ROOT	ADOXACEAE	G5 S1		SENSITIVE	WATCH	GRAN, JEFF, STIL
AGASTACHE CUSICKII CUSICK'S HORSE-MINT	LAMIACEAE	G3G4 S1	PROPOSED	SENSITIVE SENSITIVE		BEAV
AGOSERIS LACKSCHEWITZII PINK AGOSERIS	ASTERACEAE	G3 S2S3		SENSITIVE		BEAV, CARB, CASC, DEER, GRAN, JUDI, MADI, MEAG, PARK, SILV, SWEE
AGROSTIS BOREALIS NORTHERN BENTGRASS	POACEAE	G5 S2				MISS, RAVA
ALLIUM ACUMINATUM TAPERTIP ONION	LILIACEAE	G5 S1		SENSITIVE		MADI, RAVA, SAND
ALLIUM COLUMBIANUM COLUMBIA ONION	LILIACEAE	G3 SH				SAND
ALLIUM FIBRILLUM FRINGED ONION	LILIACEAE	G4 S2		SENSITIVE		FLAT, GLAC, LINC, MISS
ALLIUM PARVUM DWARF ONION	LILIACEAE	G5 S2				RAVA
ALLIUM SIMILLIMUM DWARF ONION	LILIACEAE	G4 S1				GALL, RAVA
ALLOTROPA VIRGATA CANDYSTICK	MONOTROPACEAE	G4 S2S3		SENSITIVE		BEAV, DEER, GRAN, RAVA
AMERORCHIS ROTUNDIFOLIA ROUND-LEAVED ORCHIS	ORCHIDACEAE	G5 S2S3		SENSITIVE	WATCH	FLAT, LEWI, LINC, POND, POWE, TETO

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AMMANNIA COCCINEA SCARLET AMMANNIA	LYTHRACEAE	G5 S1				GARF, PHIL
AMORPHA CANESCENS LEAD PLANT	FABACEAE	G5 SH				CART
ANTENNARIA DENSIFOLIA DENSE-LEAVED ANTENNARIA	ASTERACEAE	G3 S1		SENSITIVE		DEER, GRAN
AQUILEGIA BREVISTYLA SHORT-STYLED COLUMBINE	RANUNCULACEAE	G5 S2		SENSITIVE		JUDI, SWEE
AQUILEGIA FORMOSA SITKA COLUMBINE	RANUNCULACEAE	G5 S1				BEAV
ARABIS DEMISSA VAR LANGUIDA DAGGETT ROCK CRESS	BRASSICACEAE	G5T3 S1			WATCH	CARB
ARABIS FECUNDA SAPPHIRE ROCKCRESS	BRASSICACEAE	G2 S2		SENSITIVE	SENSITIVE	BEAV, RAVA, SILV
ARABIS LYRATA VAR KAMCHATICA LYRE-LEAF ROCKCRESS	BRASSICACEAE	G5T? S1				FLAT, GLAC
ARCTOSTAPHYLOS PATULA GREEN-LEAF MANZANITA	ERICACEAE	G4 S1				LAKE, SAND
ARTEMISIA ARCTICA SSP ARCTICA BOREAL WORMWOOD	ASTERACEAE	G5T? SH				GLAC
ASCLEPIAS INCARNATA SWAMP MILKWEED	ASCLEPIADACEAE	G5 S1				CARB, FALL

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ASCLEPIAS OVALIFOLIA OVALLEAF MILKWEED	ASCLEPIADACEAE	G3G5 S1			WATCH	CART
ASCLEPIAS STENOPHYLLA NARROWLEAF MILKWEED	ASCLEPIADACEAE	G4G5 S1			WATCH	CART
ASPLENIUM TRICHOMANES MAIDENHAIR SPLEENWORT	ASPLENIACEAE	G5 SH		SENSITIVE	WATCH	FLAT, LAKE
ASTER FRONDOSUS ALKALI ASTER	ASTERACEAE	G4 S1				SAND
ASTER GLAUCODES GRAY ASTER	ASTERACEAE	G3G4 SU				CARB
ASTER SIMPLEX VAR RAMOSISSIMUS PANICLED ASTER	ASTERACEAE	G5T? S1				POWD
ASTRAGALUS ARETIOIDES SWEETWATER MILKVETCH	FABACEAE	G4 S2			WATCH	BIGH, CARB
ASTRAGALUS BARRII BARR'S MILKVETCH	FABACEAE	G3 S3		SENSITIVE	WATCH	BIGH, CART, POWD, ROSE
ASTRAGALUS CERAMICUS VAR APUS PAINTED MILKVETCH	FABACEAE	G4T3 S1			SENSITIVE	BEAV
ASTRAGALUS CONVALLARIUS VAR CONVALLARIUS LESSER RUSHY MILKVETCH	FABACEAE	G5T5 S2			WATCH	BEAV, BROA, LEWI
ASTRAGALUS GEYERI GEYER'S MILKVETCH	FABACEAE	G3G4 S2			SENSITIVE	CARB, CUST, DAWS, GARF

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ASTRAGALUS GRAYI GRAY'S MILKVETCH	FABACEAE	G4? S1				BIGH, CARB
ASTRAGALUS MOLYBDENUS LEADVILLE MILKVETCH	FABACEAE	G3 S2		SENSITIVE		TETO
ASTRAGALUS OREGANUS WIND RIVER MILKVETCH	FABACEAE	G4? S1			WATCH	CARB
ASTRAGALUS RACEMOSUS VAR LONGISETUS RACEME MILKVETCH	FABACEAE	G5T4 S1			WATCH	CART, FALL
ASTRAGALUS SCAPHOIDES BITTERROOT MILKVETCH SENSITIVE	FABACEAE	G3 S2	PROPOSED	SENSITIVE	SENSITIVE	BEAV
ASTRAGALUS TERMINALIS RAILHEAD MILKVETCH	FABACEAE	G3G4 S2			SENSITIVE	BEAV, MADI
ATHYSANUS PUSILLUS SANDWEED	BRASSICACEAE	G4 S1		SENSITIVE		RAVA
ATRIPLEX TRUNCATA WEDGE-LEAVED SALTBUH	CHENOPODIACEAE	G5 S1			WATCH	BEAV, LAKE, LEWI
BACOPA ROTUNDIFOLIA ROUNDLEAF WATER-HYSSOP	SCROPHULARIACEAE	G5 S1			WATCH	CASC, FERG, GARF, PETR, PHIL
BALSAMORHIZA MACROPHYLLA LARGE-LEAFED BALSAMROOT	ASTERACEAE	G3G5 S1		SENSITIVE	WATCH	BEAV, GALL, MADI
BIDENS BECKII BECK WATER-MARIGOLD	ASTERACEAE	G4G5TU S2				FLAT, LAKE, MISS

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BIDENS COMOSA THREELOBED BEGGARTICKS	ASTERACEAE	G5 S1			WATCH	CHOU, HILL, PHIL, RICH
BIDENS VULGATA VAR SCHIZANTHA TALL BUR-MARIGOLD	ASTERACEAE	G5T? S1			WATCH	RICH
BOISDUVALIA DENSIFLORA DENSE SPIKE-PRIMROSE	ONAGRACEAE	G5 SH				SAND
BOTRYCHUM ASCENDENS UPWARD-LOBED MOONWORT	OPHIOGLOSSACEAE	G3? S1		SENSITIVE		FLAT, LEWI, LINC
BOTRYCHUM CRENULATUM WAVY MOONWORT	OPHIOGLOSSACEAE	G3? S2		SENSITIVE		FLAT, GRAN, LAKE, LINC, SAND
BOTRYCHUM HESPERIUM WESTERN MOONWORT	OPHIOGLOSSACEAE	G3 S1		SENSITIVE		DEER, FLAT, GLAC
BOTRYCHUM LINEARE LINEARLEAF MOONWORT	OPHIOGLOSSACEAE	G1G2 S1				LAKE
BOTRYCHUM MINGANENSE MINGAN ISLAND MOONWORT	OPHIOGLOSSACEAE	G4 S2S3		SENSITIVE		CASC, FLAT, GLAC, GRAN, LAKE, LINC, MISS, TETO
BOTRYCHUM MONTANUM MOUNTAIN MOONWORT	OPHIOGLOSSACEAE	G3 S2		SENSITIVE		FLAT, LAKE, LINC, SAND
BOTRYCHUM PARADOXUM PECULIAR MOONWORT	OPHIOGLOSSACEAE	G2 S1		SENSITIVE		DEER, GLAC, GRAN, LINC, POND, TETO
BOTRYCHUM SPATHULATUM SPOON-LEAF MOONWORT	OPHIOGLOSSACEAE	G3G4 S1	PROPOSED	SENSITIVE		LAKE

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BRASENIA SCHREBERI WATERSHIELD	CABOMBACEAE	G5 S2				FLAT, LAKE, LINC, MISS, RAVA
BRAYA HUMILIS LOW BRAYA	BRASSICACEAE	G4 S1				BEAV
CALAMAGROSTIS TWEEDYI CASCADE REEDGRASS	POACEAE	G3 S2				MINE, MISS, RAVA, SAND
CALOCHORTUS BRUNEAUNIS BRUNEAU MARIPOSA LILY	LILIACEAE	G5 S1				BEAV
CAMISSONIA ANDINA OBSCURE EVENING-PRIMROSE	ONAGRACEAE	G4 S1			SENSITIVE	CARB, MISS, RAVA
CAMISSONIA PARVULA SMALL CAMISSONIA	ONAGRACEAE	G4 S1			SENSITIVE	CARB
CARDAMINE OLIGOSPERMA VAR KAMTSCHATICA FEW-SEEDED BITTERCRESS	BRASSICACEAE	G5T? S1				FLAT
CAREX AMPLIFOLIA BIG-LEAF SEDGE	CYPERACEAE	G4 S1				SAND
CAREX CHORDORRHIZA CREEPING SEDGE	CYPERACEAE	G5 S1		SENSITIVE		FLAT, POWE
CAREX COMOSA BRISTLY SEDGE	CYPERACEAE	G5 S1				FLAT
CAREX CRAWEI CRAW'S SEDGE	CYPERACEAE	G5 S2			SENSITIVE	BEAV, CASC, POND, POWE, PRAI, TETO

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CAREX EBURNEA IVORY SEDGE	CYPERACEAE	G5 SU			WATCH	DAWS, FERG, FLAT, RICH
CAREX GRAVIDA VAR GRAVIDA PREGNANT SEDGE	CYPERACEAE	G5 S1			WATCH	BIGH, POWD, ROSE
CAREX LENTICULARIS VAR DOLIA GOOSE-GRASS SEDGE	CYPERACEAE	G5T2Q S1			WATCH	FLAT, GLAC
CAREX LIVIDA PALE SEDGE	CYPERACEAE	G5 S2		SENSITIVE		FLAT, GLAC, LAKE, LEWI, MISS, POWE, TETO
CAREX MARITIMA VAR INCURVIFORMIS MARITIME SEDGE	CYPERACEAE	G3G5T? S1				DEER, GLAC, TETO
CAREX MULTICOSTATA MANY-RIBBED SEDGE	CYPERACEAE	G5 S1			WATCH	BEAV, GALL, PARK
CAREX NEUROPHORA ALPINE-NERVED SEDGE	CYPERACEAE	G4 S2				BEAV, DEER, GRAN, MADI, MISS, PARK, RAVA, STIL
CAREX NORVEGICA SSP STEVENII STEVEN'S SCANDINAVIAN SEDGE	CYPERACEAE	G5T? SU				
CAREX OCCIDENTALIS WESTERN SEDGE	CYPERACEAE	G4 SH			WATCH	BEAV
CAREX PARRYANA SSP IDAHOA IDAHO SEDGE	CYPERACEAE	G2Q S2		SENSITIVE		BEAV, MADI, POWE, SILV
CAREX PAUPERCULA POOR SEDGE	CYPERACEAE	G5 S2		SENSITIVE		FLAT, LAKE, LINC, MISS, RAVA, TETO

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CAREX PETRICOSA ROCK SEDGE	CYPERACEAE	G4 S1				GLAC
CAREX PRAIREA PRAIRIE SEDGE	CYPERACEAE	G5? S1				
CAREX ROSTRATA BEAKED SEDGE	CYPERACEAE	G5 S1				FLAT
CAREX SCOPARIA POINTED BROOM SEDGE	CYPERACEAE	G5 S1				MISS, RAVA
CAREX STENOPTILA SMALL-WINGED SEDGE	CYPERACEAE	G3? S1				FLAT, GALL, RAVA, YNPK
CAREX SYCHNOCEPHALA MANY-HEADED SEDGE	CYPERACEAE	G4 S1				CASC, GLAC, LAKE, LINC, SHER
CAREX TENUIFLORA THIN-FLOWERED SEDGE	CYPERACEAE	G5 S1				FLAT
CAREX TINCTA SLENDER SEDGE	CYPERACEAE	G4G5 SU				GLAC, LAKE, PARK
CASTILLEJA CERVINA DEER INDIAN PAINTBRUSH	SCROPHULARIACEAE	G3G4 S1				FLAT, MISS, POWE
CASTILLEJA COVILLEANA COVILLE INDIAN PAINTBRUSH	SCROPHULARIACEAE	G3G4 S2		SENSITIVE		RAVA
CASTILLEJA EXILIS ANNUAL INDIAN PAINTBRUSH	SCROPHULARIACEAE	G5 S1				DEER, GALL, JEFF, PARK, SILV

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CASTILLEJA GRACILLIMA SLENDER INDIAN PAINTBRUSH	SCROPHULARIACEAE	G3G4 S1		SENSITIVE	WATCH	BEAV, GALL, MADI, YNPK
CEANOTHUS HERBACEUS VAR PUBESCENS NEW JERSEY TEA	RHAMNACEAE	G5T? SH			WATCH	POWD
CELASTRUS SCANDENS BITTERSWEET	CELASTRACEAE	G5 S1			WATCH	CART, DAWS
CENTAURIUM EXALTATUM WESTERN CENTAURY	GENTIANACEAE	G5 SH				BIGH
CENTUNCULUS MINIMUS CHAFFWEED	PRIMULACEAE	G5 S1			WATCH	CASC, LAKE, MISS, RAVA
CERCOCARPUS MONTANUS VAR GLABER BIRCHLEAF MOUNTAIN-MAHOGANY	ROSACEAE	G5TU S1			WATCH	TREA
CHENOPODIUM SUBGLABRUM SMOOTH GOOSEFOOT	CHENOPODIACEAE	G3 S1			WATCH	CART, CASC, CUST
CHRYSOPTERIS DEPRESSA LOW GOLDEN ASTER	ASTERACEAE	G5T2 SU				
CHRYSOPTERIS TETRANDEM NORTHERN GOLDEN-CARPET	SAXIFRAGACEAE	G5 S2S3				GRAN, RAVA
CHRYSOPTERIS PARRYI SSP MONTANUS CENTENNIAL RABBITBRUSH	ASTERACEAE	G5T1 S1		SENSITIVE		BEAV
CIRSIIUM BREVISTYLUM SHORT-STYLED THISTLE	ASTERACEAE	G4 S1				FLAT, MINE, SAND

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CIRSIUM LONGISTYLUM LONG-STYLED THISTLE	ASTERACEAE	G2Q S2				BROA, CASC, JEFF, JUDI, LEWI, MEAG, WHEA
CLARKIA RHOMBOIDEA COMMON CLARKIA	ONAGRACEAE	G4 S1		SENSITIVE		LINC, SAND
CLAYTONIA ARENICOLA SAND SPRINGBEAUTY	PORTULACACEAE	G4 S1				SAND
CLEOME LUTEA YELLOW BEE PLANT	CAPPARACEAE	G5 S1			WATCH	BIGH, CARB
COLLOMIA TINCTORIA YELLOW-STAINING COLLOMIA	POLEMONIACEAE	G5 S1				CASC, FLAT, LAKE, RAVA
CONIOSELINUM SCOPULORUM HEMLOCK PARSLEY	APIACEAE	G4 S1			WATCH	BIGH, CARB
CORYDALIS SEMPERVIRENS PALE CORYDALIS	FUMARIACEAE	G4G5 S1				FLAT, GLAC
CRYPTANTHA FENDLERI FENDLER CAT'S-EYE	BORAGINACEAE	G4 S1			WATCH	BEAV, SHER
CRYPTANTHA FLAVOCULATA PALE YELLOW CRYPTANTHA	BORAGINACEAE	G5 S1				CARB
CRYPTANTHA HUMILIS CRYPTANTHA	BORAGINACEAE	G4? SU			WATCH	BEAV, PARK
CRYPTANTHA SCOPARIA MINER'S CANDLE	BORAGINACEAE	G3 S1			SENSITIVE	CARB

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CUSCUTA PENTAGONA FIELD DODDER	CUSCUTACEAE	G5 SU				PRAI
CYPERUS ACUMINATUS SHORT-POINTED FLATSEGE	CYPERACEAE	G5 S1			WATCH	CASC, SAND
CYPERUS ERYTHORRHIZOS RED-ROOT FLATSEGE	CYPERACEAE	G5 SU				FLAT, MISS
CYPERUS RIVULARIS SHINING FLATSEGE	CYPERACEAE	G5 S1				MISS, RAVA
CYPERUS SCHWEINITZII SCHWEINITZ' FLATSEGE	CYPERACEAE	G5 S1			WATCH	CART, CASC, CUST, SHER
CYPRIPEDIUM CALCEOLUS VAR PARVIFLORUM SMALL YELLOW LADY'S-SLIPPER	ORCHIDACEAE	G5 S2S3		SENSITIVE	WATCH	FLAT, GALL, GRAN, JUDI, LAKE LEWI, LINC, MISS, PARK, STIL, SWEE, TETO
CYPRIPEDIUM FASCICULATUM CLUSTERED LADY'S-SLIPPER	ORCHIDACEAE	G4 S2		SENSITIVE		LAKE, MINE, SAND
CYPRIPEDIUM PASSERINUM SPARROW'S-EGG LADY'S-SLIPPER	ORCHIDACEAE	G4G5 S2		SENSITIVE		FLAT, LAKE, LEWI, LINC, POND, POWE, TETO
CYSTOPTERIS MONTANA MOUNTAIN BLADDER FERN	DRYOPTERIDACEAE	G5 SH				GLAC
DALEA ENNEANDRA NINE-ANTHER DALEA	FABACEAE	G5 S1			WATCH	CUST, RICH, YELL
DALEA VILLOSA VAR VILLOSA SILKY PRAIRIE CLOVER	FABACEAE	G5T S1			WATCH	CART, RICH

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DICHANTHELIUM OLIGOSANTHES VAR SCRIBNERIAN SCRIBNER'S PANIC GRASS	POACEAE	G5T5 S1			WATCH	LAKE, POWD
DOWNINGIA LAETA GREAT BASIN DOWNINGIA	CAMPANULACEAE	G5 S1			WATCH	BEAV, LEWI, MADI, TETO
DRABA DENSIFOLIA DENSE-LEAF DRABA	RASSICACEAE	G5 S2				GLAC, JEFF, LEWI, PARK, SILV
DRABA FLADNIZENSIS WHITE ARCTIC DRABA	BRASSICACEAE	G4 S1				CARB, DEER
DRABA GLOBOSA ROUND-FRUITED DRABA	BRASSICACEAE	G3G4 S1			WATCH	BEAV, MADI, RAVA
DRABA MACOUNII MACOUN'S DRABA	BRASSICACEAE	G3 S1				FLAT, GLAC
DRABA PORSILDII PORSILD'S DRABA	BRASSICACEAE	G3 S1				CARB
DRABA VENTOSA WIND RIVER DRABA	BRASSICACEAE	G3 S1				BEAV, MADI
DROSERA ANGLICA ENGLISH SUNDEW	DROSERACEAE	G5 S2				FLAT, GALL, GRAN, LAKE, LEWI, LINC, MADI, MISS, POWE, RAVA
DROSERA LINEARIS LINEAR-LEAVED SUNDEW	DROSERACEAE	G4 S1		SENSITIVE		FLAT, LEWI, POWE
DRYAS INTEGRIFOLIA ENTIRE-LEAVED AVENS	ROSACEAE	G5 S1				FERG, GOLD, MADI

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DRYOPTERIS CRISTATA BUCKLER FERN	DRYOPTERIDACEAE	G5 S2		SENSITIVE		FLAT, LAKE, MISS, RAVA
ELATINE BRACHYSPERMA SHORT-SEEDED WATER-WORT	ELATINACEAE	G5 SU				GALL, MISS
ELATINE CALIFORNICA CALIFORNIA WATERWORT	ELATINACEAE	G5 SU				CASC, LAKE, MISS, SAND
ELEOCHARIS ROSTELLATA BEAKED SPIKERUSH	CYPERACEAE	G5 S2			WATCH	BIGH, CARB, FLAT, LAKE, MADI, MEAG, PARK, SAND, TETO
ELEOCHARIS XYRIDIFORMIS CREEPING SPIKE-RUSH	CYPERACEAE	G4 S1				CART, PETR
ELODEA LONGIVAGINATA LONG SHEATH WATERWEED	HYDROCHARITACEAE	G4G5 S1			WATCH	GLAC, LIBE, PHIL
ELYMUS FLAVESCENS SAND WILD RYE	POACEAE	G4 S1			SENSITIVE	BEAV, MADI
ELYMUS INNOVATUS NORTHERN WILD-RYE	POACEAE	G5 S1		SENSITIVE		CASC, GLAC, POND
EPIPACTIS GIGANTEA GIANT HELLEBORINE	ORCHIDACEAE	G4 S2		SENSITIVE	WATCH	CARB, CASC, FLAT, GRAN, LAKE, MADI, POWE, TETO
ERIGERON ASPERUGINEUS IDAHO FLEABANE	ASTERACEAE	G4 S1		SENSITIVE	WATCH	BEAV, MADI, RAVA
ERIGERON BELLIDIASTRUM WESTERN FLEABANE	ASTERACEAE	G5 SU				YELL

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ERIGERON EATONII SSP EATONII EATON'S DAISY	ASTERACEAE	G5T5 S1		WATCH		FLAT, SWEE
ERIGERON EVERMANNII EVERMANN FLEABANE	ASTERACEAE	G4 S1		SENSITIVE		RAVA
ERIGERON FLABELLIFOLIUS FAN-LEAVED FLEABANE	ASTERACEAE	G3G4 S3				CARB, PARK
ERIGERON FLAGELLARIS RUNNING FLEABANE	ASTERACEAE	G5 S1				LEWI
ERIGERON FORMOSISSIMUS VAR VISCIDUS BEAUTIFUL FLEABANE	ASTERACEAE	G5T4 S1			WATCH	CARB, MADI, PARK
ERIGERON LACKSCHEWITZII FRONT RANGE FLEABANE	ASTERACEAE	G3 S3	PROPOSED	SENSITIVE		FLAT, LEWI, POND, TETO
ERIGERON LEIOMERUS SMOOTH FLEABANE	ASTERACEAE	G4 S1				BEAV, MADI
ERIGERON LINEARIS LINEARLEAF FLEABANE	ASTERACEAE	G5 S1		SENSITIVE		BEAV, RAVA
ERIOGONUM CAESPITOSUM MAT BUCKWHEAT	POLYGONACEAE	G5 S1				BEAV
ERIOGONUM LAGOPUS RABBIT BUCKWHEAT	POLYGONACEAE	G3 S3				CARB, PARK
ERIOGONUM SALSUGINOSUM SMOOTH BUCKWHEAT	POLYGONACEAE	G4? S1			SENSITIVE	CARB

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ERIOPHORUM CALLITRIX SHEATHED COTTON-GRASS	CYPERACEAE	G5 S1				CARB
ERIOPHORUM GRACILE SLENDER COTTONGRASS	CYPERACEAE	G5 SU	PROPOSED	SENSITIVE		FLAT, LAKE, LINC
ERIOPHORUM VIRIDICARINATUM GREEN-KEELED COTTONSEGE	CYPERACEAE	G5 S2				FLAT, GLAC, LAKE, LEWI, POWE, TETO
EUPATORIUM MACULATUM VAR BRUNERI JOE-PYE WEED	ASTERACEAE	G5TU S1			WATCH	BIGH, CARB, ROSE
EUPATORIUM OCCIDENTALE WESTERN BONESET	ASTERACEAE	G4 S1		SENSITIVE		MINE, RAVA
EUPHRASIA ARCTICA VAR DISJUNCTA DISJUNCT EYEBRIGHT	SCROPHULARIACEAE	G5 S1				GLAC
EUSTOMA GRANDIFLORUM SHOWY PRAIRIE-GENTIAN	GENTIANACEAE	G5 S1			WATCH	MCCO
EVAX PROLIFERA BIG-HEAD EVAX	ASTERACEAE	G5 SU				CUST, POWD
FESTUCA VIVIPARA VIVIPAROUS FESCUE	POACEAE	G4G5Q S2				FLAT, GLAC
GENTIANA GLAUCA GLAUCOUS GENTIAN	GENTIANACEAE	G4G5 S1				FLAT
GENTIANA PROSTRATA PYGMY GENTIAN	GENTIANACEAE	G5 S2				BEAV, CARB, DEER, GLAC, STIL

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GENTIANELLA TENELLA SLENDER GENTIAN	GENTIANACEAE	G4G5 S2				CARB, MADI, PARK, STIL
GENTIANOPSIS MACOUNII MACOUN'S GENTIAN	GENTIANACEAE	G5 S1	PROPOSED	SENSITIVE		GLAC, TETO
GENTIANOPSIS SIMPLEX HIKER'S GENTIAN	GENTIANACEAE	G4 S1		SENSITIVE	WATCH	BEAV, CARB, MISS
GILIA INCONSPICUA SHY GILIA	POLEMONIACEAE	G5 S1				BEAV, CARB
GLOSSOPETALON NEVADENSE SPINY GREENBUSH	CROSSOSOMATAACEAE	G5?Q S1		SENSITIVE		RAVA
GOODYERA REPENS NORTHERN RATTLESNAKE-PLANTAIN	ORCHIDACEAE	G5 S2S3		SENSITIVE		FERG, FLAT, JUDI, MEAG, WHEA
GRATIOLA EBRACTEATA BRACLESS HEDGE-HYSSOP	SCROPHULARIACEAE	G4 S1				CASC, GLAC, TETO, YELL
GRAYIA SPINOSA SPINY HOPSAGE	CHENOPODIACEAE	G5 S1			WATCH	BEAV, BIGH, CARB, PARK
GRINDELIA HOWELLII HOWELL'S GUM-WEED	ASTERACEAE	G3 S2S3		SENSITIVE		LAKE, MISS, POWE
GYMNOSTERIS PARVULA SMALL-FLOWER GYMNOSTERIS	POLEMONIACEAE	G4 SH				GALL
HALENIA DEFLEXA SSP DEFLEXA SPURRED GENTIAN	GENTIANACEAE	G5TU S2	PROPOSED	SENSITIVE		FLAT, LINC

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HALIMOLOBOS PERPLEXA VAR LEMHIENSIS PUZZLING ROCKCRESS	BRASSICACEAE	G4T4 S1		SENSITIVE		RAVA
HAPLOPAPPUS ABERRANS IDAHO GOLDEN-WEED	ASTERACEAE	G3 S1		SENSITIVE		RAVA
HAPLOPAPPUS CARTHAMOIDES VAR SUBSQUARROSUS BEARTOOTH LARGE-FLOWERED GOLDENWEED	ASTERACEAE	G4G5T2T3 S2			WATCH	CARB
HAPLOPAPPUS MACRONEMA VAR MACRONEMA DISCOID GOLDENWEED	ASTERACEAE	G4T4 S1		SENSITIVE		BEAV
HAPLOPAPPUS NANUS DWARF GOLDENWEED	ASTERACEAE	G5 S1			WATCH	BEAV
HAPLOPAPPUS PYGMAEUS PYGMY GOLDENWEED	ASTERACEAE	G4 SH				DEER, GALL
HELENIMUM HOOPESII ORANGE SNEEZEWEED	ASTERACEAE	G5 S1			WATCH	BEAV
HEMICARPHA DRUMMONDII DRUMMOND'S HEMICARPHA	CYPERACEAE	G4G5 SU				CARB
HETERANTHERA DUBIA WATER STAR-GRASS	PONTEDERIACEAE	G5 S1				FLAT, SAND
HETEROCODON RARIFLORUM WESTERN PEARL-FLOWER	CAMPANULACEAE	G5 S1				LAKE, RAVA, SAND
HOWELLIA AQUATILIS WATER HOWELLIA	CAMPANULACEAE	G2 S2	LT	THREATENED		LAKE, MISS

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HUTCHINSIA PROCUMBENS HUTCHINSIA	BRASSICACEAE	G5 S1			WATCH	BEAV, POWE
IDAHOA SCAPIGERA SCALEPOD	BRASSICACEAE	G5 S1		SENSITIVE		RAVA
IPOMOPSIS CONGESTA SSP CREBRIFOLIA BALLHEAD GILIA	POLEMONIACEAE	G4T3 S2				BEAV, MADI
IPOMOPSIS MINUTIFLORA SMALL-FLOWER STANDING-CYPRESS	POLEMONIACEAE	G2G3 S1				RAVA
JUNCUS ACUMINATUS TAPERED RUSH	JUNCACEAE	G5 S1				TETO
JUNCUS COVILLEI VAR COVILLEI COVILLE'S RUSH	JUNCACEAE	G4G5T5 SU				MINE, MISS, RAVA
JUNCUS COVILLEI VAR OBTUSATUS COVILLE'S RUSH	JUNCACEAE	G4G5T4 SU				RAVA
JUNCUS HALLII HALL'S RUSH	JUNCACEAE	G4G5 S2		SENSITIVE		MADI, MEAG, POWE, SILV
JUNCUS TRIGLUMIS VAR ALBESCENS THREE-FLOWERED RUSH	JUNCACEAE	G5T5 S2				FLAT, GLAC, PARK
JUNCUS TRIGLUMIS VAR TRIGLUMIS THREE-FLOWERED RUSH	JUNCACEAE	G5T5 SU				CARB, STIL
KALMIA OCCIDENTALIS PALE LAUREL	ERICACEAE	G5 S1				FLAT, MISS

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KELLOGGIA GALIOIDES KELLOGGIA	RUBIACEAE	G5 S1				MINE
KOBRESIA MACROCARPA LARGE-FRUITED KOBRESIA	CYPERACEAE	G5 S1		SENSITIVE		CARB
KOBRESIA SIMPLICIUSCULA SIMPLE KOBRESIA	CYPERACEAE	G5 S2		WATCH		BEAV, GLAC, GRAN, PARK, TETO
KOCHIA AMERICANA RED SAGE	CHENOPODIACEAE	G5 SU				BEAV
KOENIGIA ISLANDICA ISLAND KOENIGIA	POLYGONACEAE	G4 S1				CARB
LAGOPHYLLA RAMOSISSIMA SLENDER HARELEAF	ASTERACEAE	G5 S1				LAKE, SAND
LATHYRUS BIJUGATUS LATAH TULE PEA	FABACEAE	G4G5 S1				FLAT
LEPTODACTYLON CAESPITOSUM LEPTODACTYLON	POLEMONIACEAE	G3G4 S1			WATCH	CARB
LESQUERELLA CARINATA VAR. LANGUIDA GARNET BLADDERPOD	BRASSICACEAE	G4T1 S1			SENSITIVE	GRAN
LESQUERELLA HUMILIS BITTERROOT BLADDERPOD	BRASSICACEAE	G1 S1		SENSITIVE		RAVA
LESQUERELLA KLAUSII DIVIDE BLADDERPOD	BRASSICACEAE	G3 S3			WATCH	BROA, LEWI, MEAG

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LESQUERELLA LESICII PRYOR MOUNTAIN BLADDERPOD	BRASSICACEAE	G1 S1			SENSITIVE	CARB
LESQUERELLA PAYSONII PAYSON BLADDERPOD	BRASSICACEAE	G3 S1		SENSITIVE		BEAV, GRAN
LESQUERELLA PULCHELLA BEAUTIFUL BLADDERPOD	BRASSICACEAE	G2 S2		SENSITIVE	SENSITIVE	BEAV
LEWISIA COLUMBIANA VAR WALLOWENSIS COLUMBIA LEWISIA	PORTULACACEAE	G4T4 S1				RAVA
LEWISIA PYGMAEA VAR NEVADENSIS NEVADA BITTERROOT	PORTULACACEAE	G4 S1				BEAV, DEER, RAVA
LIGUSTICUM PORTERI PORTER'S LOVAGE	APIACEAE	G4G5 SU		WATCH		CARB
LILAEA SCILLOIDES FLOWERING QUILLWORT	JUNCAGINACEAE	G4 S1				LAKE
LILIUM COLUMBIANUM COLUMBIA LILY	LILIACEAE	G4G5 S2				LINC
LINARIA CANADENSIS VAR TEXANA BLUE TOADFLAX	SCROPHULARIACEAE	G4G5 S1			WATCH	CART, DAWS, MCCO
LIPARIS LOESELII LOESEL'S TWAYDLADE	ORCHIDACEAE	G5 S1		SENSITIVE		LAKE
LOBELIA SPICATA PALE-SPIKED LOBELIA	CAMPANULACEAE	G5 SH				DANI, RICH, SHER

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LOMATIUM ATTENUATUM TAPER-TIP DESERT-PARSLEY	APIACEAE	G2 S2			SENSITIVE	BEAV
LOMATIUM GEYERI GEYER'S BISCUITROOT	APIACEAE	G3G4 S2		SENSITIVE		LINC
LOMATIUM NUTTALLII NUTTALL DESERT-PARSLEY	APIACEAE	G3 S1			WATCH	BIGH
LOMATOGONIUM ROTATUM FELWORT	GENTIANACEAE	G5 S1			WATCH	BEAV
LYCOPODIUM DENDROIDEUM TREELIKE CLUBMOSS	LYCOPODIACEAE	G5 S1			WATCH	FLAT, GLAC
LYCOPODIUM INUNDATUM NORTHERN BOG CLUBMOSS	LYCOPODIACEAE	G5 S1		SENSITIVE		FLAT, MISS
MACHAERANTHERA COMMIXTA UNITED TANSY-ASTER	ASTERACEAE	G4G5T3T4 S1			WATCH	MADI
MADIA MINIMA SMALL-HEADED TARWEED	ASTERACEAE	G4 S1				LINC, MISS, RAVA, SAND
MAIANTHEMUM CANADENSE VAR INTERIUS WILD LILY-OF-THE-VALLEY	LILIACEAE	G5T4 S1				CART
MALACOTHRIX TORREYI DESERT DANDELION	ASTERACEAE	G4 S1			SENSITIVE	CARB
MENTZELIA MONTANA WHITE-BRACT STICKLEAF	LOASACEAE	G4 SU				PARK

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MENTZELIA NUDA BRACKETLESS MENTZELIA	LOASACEAE	G5 S1		WATCH	WATCH	BIGH, CUST, DAWS, ROSE, TREA, VALL
MENTZELIA PUMILA DWARF MENTZELIA	LOASACEAE	G4 S2		SENSITIVE	WATCH	CARB
MERTENSIA BELLA OREGON BLUEBELLS	BORAGINACEAE	G4 S1		SENSITIVE		MISS
MIMULUS BREVIFLORUS SHORT-FLOWERED MONKEYFLOWER	SCROPHULARIACEAE	G4 S1				FLAT
MIMULUS GLABRATUS VAR FREMONTII GLABROUS MONKEYFLOWER	SCROPHULARIACEAE	G5TUQ SU				ROSE
MIMULUS NANUS DWARF PURPLE MONKEYFLOWER	SCROPHULARIACEAE	G5 S1				GALL, RAVA
MIMULUS PRIMULOIDES PRIMROSE MONKEYFLOWER	SCROPHULARIACEAE	G4 S2		SENSITIVE		BEAV, RAVA
MIRABILIS HIRSUTA HAIRY FOUR-O'CLOCK	NYCTAGINACEAE	G5 S1			WATCH	CART, CHOU, SHER
MYOSOTIS VERNA EARLY FORGET-ME-NOT	BORAGINACEAE	G5 S1				FLAT, LAKE, MISS, RAVA
NAJAS GUADALUPENSIS GUADALUPE WATER-NYMPH	NAJADACEAE	G5 S1			WATCH	CASC, FLAT, LAKE, RAVA
NAMA DENSUM NAMA	HYDROPHYLLACEAE	G5 S1			SENSITIVE	CARB

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NYMPHAEA TETRAGONA PYGMY WATER-LILY	NYMPHAEACEAE	G5 S1				FLAT, LAKE, MISS
OENOTHERA PALLIDA VAR IDAHOENSIS PALE EVENING-PRIMROSE	ONAGRACEAE	G5T4Q S1			SENSITIVE	BEAV
OPHIOGLOSSUM PUSILLUM ADDER'S TONGUE	OPHIOGLOSSACEAE	G5 S2		SENSITIVE		FLAT, LAKE, LINC, MISS
OROGENIA FUSIFORMIS TAPERED-ROOT OROGENIA	APIACEAE	G5 S2		SENSITIVE		BEAV, MADI, MISS, RAVA
ORYZOPSIS CONTRACTA CONTRACTED INDIAN RICEGRASS	POACEAE	G3 S2			WATCH	BEAV, DEER, MADI
OXYTROPIS CAMPESTRIS VAR COLUMBIANA COLUMBIA CRAZYWEED	FABACEAE	G5?T3Q S1				FLAT, LAKE
OXYTROPIS DEFLEXA VAR FOLIOLOSA PENDENT-POD CRAZYWEED	FABACEAE	G5T? S1				MADI
OXYTROPIS PARRYI PARRY'S CRAZYWEED	FABACEAE	G5 S1				BEAV
OXYTROPIS PODOCARPA STALKED-POD CRAZYWEED	FABACEAE	G4 S1		SENSITIVE		GLAC, TETO
PAPAVER KLUANENSIS ALPINE POPPY	PAPAVERACEAE	G3Q S1				CARB
PAPAVER PYGMAEUM ALPINE GLACIER POPPY	PAPAVERACEAE	G3 S3				FLAT, GLAC

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PEDICULARIS CONTORTA VAR RUBICUNDA COIL-BEAKED LOUSEWORT	SCROPHULARIACEAE	G5T2 S2				DEER, RAVA
PENSTEMON ANGUSTIFOLIUS NARROWLEAF PENSTEMON	SCROPHULARIACEAE	G5 S2			WATCH	CART, DAWS, FALL, MISS
PENSTEMON ATTENUATUS VAR MILITARIS TAPER-LEAVED BEARDTONGUE	SCROPHULARIACEAE	G4T4 S1		WATCH		RAVA
PENSTEMON GLOBOSUS GLOBE BEARDTONGUE	SCROPHULARIACEAE	G4 S2				BEAV, GRAN
PENSTEMON GRANDIFLORUS LARGE FLOWERED BEARDTONGUE	SCROPHULARIACEAE	G5? S1				CUST
PENSTEMON LEMHIENSIS LEMHI BEARDTONGUE	SCROPHULARIACEAE	G3 S2		SENSITIVE	SENSITIVE	BEAV, DEER, RAVA, SILV
PENSTEMON PAYETTENSIS PAYETTE BEARDTONGUE	SCROPHULARIACEAE	G4 S1				RAVA
PENSTEMON WHIPPLEANUS WHIPPLE'S BEARDTONGUE	SCROPHULARIACEAE	G5 S1			SENSITIVE	BEAV, MADI
PETASITES FRIGIDUS VAR NIVALIS PALMATE-LEAVED COLTSFOOT	ASTERACEAE	G5T? S1	PROPOSED	SENSITIVE		FLAT
PHACELIA INCANA HOARY PHACELIA	HYDROPHYLLACEAE	G3G4 S1			WATCH	BEAV
PHACELIA SCOPULINA DWARF PHACELIA	HYDROPHYLLACEAE	G4 SH			WATCH	MADI, SILV

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PHACELIA THERMALIS HOT SPRING PHACELIA	HYDROPHYLLACEAE	G3G4 S1			WATCH	FERG, GARF, PHIL
PHIPPSIA ALGIDA ICE GRASS	POACEAE	G5 S2				CARB, STIL
PHLOX ANDICOLA PLAINS PHLOX	POLEMONIACEAE	G4 S1			WATCH	CART, DAWS, WIBA
PHLOX KELSEYI VAR MISSOULENSIS MISSOULA PHLOX	POLEMONIACEAE	G5T2 S2		SENSITIVE		CASC, GRAN, JUDI, LEWI, MEAG, MISS, POWE
PHYSALIS HEDERIFOLIA VAR COMATA PRAIRIE GROUND CHERRY	SOLANACEAE	G5?T4? SU				BIGH
PHYSARIA BRASSICOIDES DOUBLE BLADDERPOD	BRASSICACEAE	G5 S1				CART
PHYSARIA DIDYMOCARPA VAR LANATA WOOLLY TWINPOD	BRASSICACEAE	G5T2 SU				BIGH
PLAGIOBOTHRYUS LEPTOCLADUS SLENDER-BRANCHED POPCORN-FLOWER	BORAGINACEAE	G4 S1			WATCH	CUST, GLAC, PHIL
POA CURTA SHORT-LEAVED BLUEGRASS	POACEAE	G4 S1			WATCH	CARB
POA LAXA SSP BANFFIANA BANFF LOOSE-FLOWERED BLUEGRASS	POACEAE	G5?T1 SU				GLAC
POLYGONUM DOUGLASII SSP AUSTINAE AUSTIN'S KNOTWEED	POLYGONACEAE	G5T4 S2S3		SENSITIVE		BROA, FLAT, LEWI, MADI, POND

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POLYGONUM POLYGALOIDES WHITE-MARGINED KNOTWEED	POLYGONACEAE	G4G5 S2				BEAV, GLAC, LEWI, POWE, SAND, TETO
POLYSTICHUM KRUCKEBERGII KRUCKEBERG'S SWORD-FERN	DRYOPTERIDACEAE	G4 S1				DEER, LAKE, MISS
POLYSTICHUM SCOPULINUM MOUNTAIN HOLLY-FERN	DRYOPTERIDACEAE	G5 S1				RAVA, SAND
POTAMOGETON OBTUSIFOLIUS BLUNT-LEAVED PONDWEED	POTAMOGETONACEAE	G5 S1		SENSITIVE		FLAT, GLAC, LAKE, MISS
POTENTILLA BREVIFOLIA SHORT-LEAVED CINQUEFOIL	ROSACEAE	G4 S1				MADI
POTENTILLA HYPARCTICA LOW ARCTIC CINQUEFOIL	ROSACEAE	G4G5 S1				CARB
POTENTILLA PLATTENSIS PLATTE CINQUEFOIL	ROSACEAE	G4 S1			WATCH	BEAV, BIGH, CARB
POTENTILLA QUINQUEFOLIA FIVE-LEAF CINQUEFOIL	ROSACEAE	G4 S1				FLAT, GLAC, GRAN, MADI, POND, VALL, YNPK
POTENTILLA UNIFLORA ONE-FLOWERED CINQUEFOIL	ROSACEAE	G5 S1				GRAN
PRIMULA ALCALINA IDAHO PRIMROSE	PRIMULACEAE	G1 SU			WATCH	BEAV
PRIMULA INCANA MEALY PRIMROSE	PRIMULACEAE	G4 S2			WATCH	BEAV

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PRUNUS PUMILA SAND CHERRY	ROSACEAE	G5 S1				FALL, MCCO
PSILOCARPHUS BREVISSIMUS DWARF WOOLLY-HEADS	ASTERACEAE	G5 S1			WATCH	CASC, PHIL, SAND
PSORALEA HYPOGAEA LITTLE INDIAN BREADROOT	FABACEAE	G4? S1			WATCH	CASC, CHOU, ROSE
QUERCUS MACROCARPA BUR OAK	FAGACEAE	G5 S1			SENSITIVE	CART
RANUNCULUS CARDIOPHYLLUS HEART-LEAVED BUTTERCUP	RANUNCULACEAE	G4 S2			WATCH	GLAC, SWEE, TOOL
RANUNCULUS GELIDUS ARCTIC BUTTERCUP	RANUNCULACEAE	G4 S1				GLAC, STIL
RANUNCULUS HYPERBOREUS ARCTIC BUTTERCUP	RANUNCULACEAE	G5 S1				DEER, GALL, JEFF
RANUNCULUS JOVIS JOVE'S BUTTERCUP	RANUNCULACEAE	G4 S2		SENSITIVE		BEAV, GALL, MADI, PARK
RANUNCULUS ORTHORHYNCHUS VAR PLATYPHYLLUS STRAIGHTBEAK BUTTERCUP	RANUNCULACEAE	G5T5 S1				DEER, GRAN, MINE, MISS
RANUNCULUS PEDATIFIDUS NORTHERN BUTTERCUP	RANUNCULACEAE	G5 S1			WATCH	CASC, FLAT, GLAC, GRAN, LIBE, TOOL
RANUNCULUS VERECUNDUS TIMBERLINE BUTTERCUP	RANUNCULACEAE	G5 S2				DEER, FLAT, GLAC, MADI

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RIBES COGNATUM SHINYLEAF GOOSEBERRY	GROSSULARIACEAE	G4Q S1				LINC, MINE, SAND
RIBES TRISTE SWAMP RED CURRANT	GROSSULARIACEAE	G5 S1				DEER, GRAN, MINE, RAVA
RORIPPA CALYCINA PERSISTENTSEPAL YELLOWCRESS	BRASSICACEAE	G3 S1		WATCH	WATCH	CASC, CHOU, CUST, MCCO, YELL
ROOTALA RAMOSIOR TOOTHCUP	LYTHRACEAE	G5 S1				LAKE, MISS, RAVA
SAGINA NIVALIS ARCTIC PEARLWORT	CARYOPHYLLACEAE	G5 S1				GLAC, STIL
SALIX BARRATTIANA BARRATT'S WILLOW	SALICACEAE	G5 S1		SENSITIVE		CARB, GLAC
SALIX CASCADENSIS CASCADES WILLOW	SALICACEAE	G4G5 S1				DEER
SALIX SERISSIMA AUTUMN WILLOW	SALICACEAE	G4 S1		WATCH	WATCH	GLAC, MEAG, POND, TETO
SALIX WOLFII VAR WOLFII WOLF'S WILLOW	SALICACEAE	G5?T4 S2		SENSITIVE	NOT LISTED	DEER, GALL, MADI, RAVA
SATUREJA DOUGLASII YERBA BUENA	LAMIACEAE	G4 S2				MISS, RAVA, SAND
SAUSSUREA Densa DWARF SAW-WORT	ASTERACEAE	G3G5 S2		SENSITIVE		LEWI, POND, TETO

MONTANA NATURAL HERITAGE PROGRAM
Plant Species of Special Concern

Species Name Common Name	Family	G & S Ranks	USF&WS Status	USFS Status	BLM Status	County Distribution
SAUSSUREA WEBERI WEBER'S SAW-WORT	ASTERACEAE	G3Q S1		SENSITIVE		DEER, GRAN
SAXIFRAGA APETALA TINY SWAMP SAXIFRAGE	SAXIFRAGACEAE	G3Q S2				BEAV, CARB, DEER, GRAN, RAVA
SAXIFRAGA HIRCULUS YELLOW MARSH SAXIFRAGE	SAXIFRAGACEAE	G5 S1				CARB
SAXIFRAGA TEMPESTIVA STORM SAXIFRAGE	SAXIFRAGACEAE	G2 S2		SENSITIVE		BEAV, DEER, GRAN, MADI, RAVA
SCHEUCHZERIA PALUSTRIS POD GRASS	SCHEUCHZERIACEAE	G5 S2		SENSITIVE		FLAT, LAKE, LINC, MISS
SCIRPUS CESPITOSUS TUFTED CLUB-RUSH	CYPERACEAE	G5 S2	PROPOSED	SENSITIVE		BEAV, FLAT, POWE, TETO
SCIRPUS HETEROCHAETUS SLENDER BULRUSH	CYPERACEAE	G5 S1				LAKE, MCCO, SAND, SHER
SCIRPUS HUDSONIANUS HUDSON'S BAY BULRUSH	CYPERACEAE	G5 S1				FLAT, GLAC
SCIRPUS PENDULUS PENDULOUS BULRUSH	CYPERACEAE	G5 SU				MISS
SCIRPUS PUMILUS SSP ROLLANDII SMALL CLUBRUSH	CYPERACEAE	G2G3Q S1				GLAC, TETO
SCIRPUS SUBTERMINALIS WATER BULRUSH	CYPERACEAE	G4G5 S2		SENSITIVE		FLAT, LEWI, LINC, MISS

MONTANA NATURAL HERITAGE PROGRAM
Plant Species of Special Concern

Species Name Common Name	Family	G & S Ranks	USF&WS Status	USFS Status	BLM Status	County Distribution
SELAGINELLA SELAGINOIDES LOW SPIKE-MOSS	SELAGINELLACEAE	G5 S1				BEAV, DEER, GRAN, MADI
SENECIO AMPLECTENS VAR HOLMII CLASPING GROUNDSEL	ASTERACEAE	G4T? S1				CARB
SENECIO EREMOPHILUS VAR EREMOPHILUS DESERT GROUNDSEL	ASTERACEAE	G4T? S1				HILL, PARK
SENECIO PAUCIFLORUS FEW-FLOWERED BUTTERWEED	ASTERACEAE	G4G5 SU				FLAT
SHOSHONEA PULVINATA SHOSHONEA	APIACEAE	G2G3 S1		SENSITIVE	SENSITIVE	CARB
SIDALCEA OREGANA OREGON CHECKER-MALLOW	MALVACEAE	G5 S1				GALL, LAKE
SILENE SPALDINGII SPALDING CAMPION	CARYOPHYLLACEAE	G2 S1		WATCH	NOT LISTED	FLAT, LAKE, LINC, SAND
SOLIDAGO PTARMICOIDES PRAIRIE ASTER	ASTERACEAE	G5 S1			DROPPED	RICH, WIBA
SOLIDAGO SPARSIFLORA FEW-FLOWERED GOLDENROD	ASTERACEAE	G? S1			WATCH	CART, GARF, STIL, WIBA
SPHAERALCEA MUNROANA WHITE-STEMMED GLOBE-MALLOW	MALVACEAE	G4 S1			DROPPED	BEAV
SPHAEROMERIA ARGENTEA CHICKEN SAGE	ASTERACEAE	G3 S2			SENSITIVE	BEAV

MONTANA NATURAL HERITAGE PROGRAM
Plant Species of Special Concern

Species Name Common Name	Family	G & S Ranks	USF&WS Status	USFS Status	BLM Status	County Distribution
SPHENOPHOLIS INTERMEDIA SLENDER WEDGEGRASS	POACEAE	G5 SH				BEAV, CART, FERG, FLAT, GALL, GRAN, LEWI, ROSE
SPIRAEA X PYRAMIDATA PYRAMIDAL SPIRAEA	ROSACEAE	HYB HYB				FLAT, LINC, MISS, SAND
SPIRANTHES DILUVIALIS UTE LADIES' TRESSES	ORCHIDACEAE	G2 S1	LT		WATCH	JEFF
SPOROBOLUS ASPER LONGLEAF DROPSEED	POACEAE	G5 SH			WATCH	CART, CUST, POWD
SPOROBOLUS NEGLECTUS SMALL DROPSEED	POACEAE	G5 SU			WATCH	GALL, SAND, WHEA
STELLARIA CRASSIFOLIA FLESHY STITCHWORT	CARYOPHYLLACEAE	G4 S1			WATCH	BEAV, CARB, DEER, SAND
STELLARIA JAMESIANA JAMES STITCHWORT	CARYOPHYLLACEAE	G5 S1			WATCH	BEAV
STEPHANOMERIA SPINOSA SPINY SKELETONWEED	ASTERACEAE	G4 S1			WATCH	BEAV, MADI
STIPA LETTERMANII LETTERMAN'S NEEDLEGRASS	POACEAE	G5 S1				BIGH, CARB, GALL, MADI
SUCKLEYA SUCKLEYANA POISON SUCKLEYA	CHENOPODIACEAE	G5 SU				ROOS, VALL
SULLIVANTIA HAPEMANII WYOMING SULLIVANTIA	SAXIFRAGACEAE	G3 S1			WATCH	BIGH, CARB

MONTANA NATURAL HERITAGE PROGRAM
Plant Species of Special Concern

Species Name Common Name	Family	G & S Ranks	USF&WS Status	USFS Status	BLM Status	County Distribution
TARAXACUM ERIOPHORUM ROCKY MOUNTAIN DANDELION	ASTERACEAE	G4 S1			SENSITIVE	BEAV, DEER, GRAN, MADI
THALICTRUM ALPINUM ALPINE MEADOWRUE	RANUNCULACEAE	G5 S1		SENSITIVE	SENSITIVE	BEAV, GRAN
THELYPODIUM PANICULATUM NORTHWESTERN THELYPODY	BRASSICACEAE	G3G4 SH			SENSITIVE	BEAV, MADI
THELYPODIUM SAGITTATUM SSP SAGITTATUM SLENDER THELYPODY	BRASSICACEAE	G4T? S2				BEAV, FLAT, GALL, LAKE, MADI
THELYPTERIS PHEGopteris NORTHERN BEECHFERN	THELYPTERIDACEAE	G5 S1		SENSITIVE		FLAT, GLAC, LINC, SAND
THLASPI PARVIFLORUM SMALL-FLOWERED PENNYCRESS	BRASSICACEAE	G3 S2		SENSITIVE		BEAV, CARB, MADI, PARK, SILV
TOFIELDIA PUSILLA TOFIELDIA	LILIACEAE	G5 S2				FLAT, GLAC
TOWNSENDIA CONDENSATA CUSHION TOWNSENDIA	ASTERACEAE	G4 S2			WATCH	BEAV, GLAC, MADI, PARK
TOWNSENDIA FLORIFER SHOWY TOWNSENDIA	ASTERACEAE	G5 S1			WATCH	BEAV
TOWNSENDIA LEPTOTES SLENDER TOWNSENDIA	ASTERACEAE	G4 SU				MADI
TRIFOLIUM CYATHIFERUM CUP CLOVER	FABACEAE	G4 S1				MISS, RAVA

MONTANA NATURAL HERITAGE PROGRAM
Plant Species of Special Concern

Species Name Common Name	Family	G & S Ranks	USF&WS Status	USFS Status	BLM Status	County Distribution
TRIFOLIUM ERIOCEPHALUM VAR PIPERI WOOLLY-HEAD CLOVER	FABACEAE	G4T3 S1		SENSITIVE		RAVA
TRIFOLIUM GYMNOCARPON HOLLYLEAF CLOVER	FABACEAE	G4 S2		SENSITIVE		GRAN, RAVA
TRisetum X ORTHOCHAETUM MISSOULA COUNTY OATS	POACEAE	HYB HYB				GLAC, MISS
UTRICULARIA INTERMEDIA FLAT-LEAVED BLADDERWORT	LENTIBULARIACEAE	G5 S1				FLAT, MISS, POWE
VACCINIUM MYRTILLOIDES VELVETLEAF BLUEBERRY	ERICACEAE	G5 S1		WATCH		FLAT
VERATRUM CALIFORNICUM CALIFORNIA FALSE-HELLEBORE	LILIACEAE	G5 S1		SENSITIVE	WATCH	GALL, GRAN, MEAG
VERNONIA FASCICULATA SSP CORYMBOSA FASCICLED IRONWEED	ASTERACEAE	G5T? SU				BLAI
VIBURNUM LENTAGO NANNYBERRY	CAPRIFOLIACEAE	G5 S1				BIGH, ROOS
VIGUIERA MULTIFLORA MANY-FLOWERED VIGUIERA	ASTERACEAE	G4G5 SU				BEAV, GALL, MADI
VIOLA RENIFOLIA KIDNEY-LEAF WHITE VIOLET	VIOLACEAE	G5 S2		SENSITIVE	WATCH	FLAT, GLAC, JEFF, LAKE, LINC, MISS, SILV
WALDSTEINIA IDAHOENSIS IDAHO BARREN STRAWBERRY	ROSACEAE	G3 S1		SENSITIVE		MISS

MONTANA NATURAL HERITAGE PROGRAM
Plant Species of Special Concern

Species Name Common Name	Family	G & S Ranks	USF&WS Status	USFS Status	BLM Status	County Distribution
WOLFFIA COLUMBIANA COLUMBIA WATER-MEAL	LEMNACEAE	G5 S2			WATCH	FLAT, LAKE, MISS, RAVA
ZIZIA AUREA GOLDEN ALEXANDERS	APIACEAE	G5 SH				CASC, CHOU

365 Taxa

Watch List Species

Information is actively collected on the distribution and status of watch species which are not tracked as Montana Species of Special Concern. The purpose is to determine the appropriateness for tracking, and to maintain information on species that have limited distribution and which are considered vulnerable. We invite collection information, citations, and comments.

<i>Achillea sibirica</i>	<i>Eriogonum umbellatum</i> var <i>aureum</i>
<i>Acorus americanus</i>	<i>Eriophorum scheuchzeri</i>
<i>Agastache foeniculum</i>	<i>Euthamia graminifolia</i>
<i>Amaranthus californicus</i>	<i>Floerkea proserpinacoides</i>
<i>Ambrosia acanthicarpa</i>	<i>Galium cymosum</i>
<i>Ambrosia tomentosa</i>	<i>Gentiana aquatica</i>
<i>Amsinckia lycopsoides</i>	<i>Geum canadense</i>
<i>Antennaria neodioica</i> ssp <i>neodioica</i>	<i>Geum rossii</i> var <i>rossii</i>
<i>Antennaria pulcherrima</i>	<i>Gnaphalium purpureum</i> var <i>purpureum</i>
<i>Arabis sparsiflora</i> var <i>columbiana</i>	<i>Grindelia nana</i> var <i>integrifolia</i>
<i>Arabis sparsiflora</i> var <i>subvillosa</i>	<i>Halimolobos virgata</i>
<i>Artemisia longiloba</i>	<i>Haplopappus multicaulis</i>
<i>Artemisia tilesii</i> ssp <i>unalaschcensis</i>	<i>Hierochloa alpina</i>
<i>Astragalus chamaeleuce</i>	<i>Huperzia haleakalae</i>
<i>Astragalus lentiginosus</i> var <i>salinus</i>	<i>Hymenopappus filifolius</i> var <i>idahoensis</i>
<i>Astragalus leptaleus</i>	<i>Hymenopappus filifolius</i> var <i>luteus</i>
<i>Astragalus miser</i> var <i>crispatus</i>	<i>Impatiens aurella</i>
<i>Astragalus platytropis</i>	<i>Impatiens ecalcarata</i>
<i>Atriplex canescens</i>	<i>Ipomopsis congesta</i> ssp <i>pseudotypica</i>
<i>Botrychium campestre</i>	<i>Isoetes lacustris</i>
<i>Calamagrostis koelerioides</i>	<i>Isoetes nuttallii</i>
<i>Calamagrostis scopulorum</i>	<i>Juncus interior</i>
<i>Camissonia tanacetifolia</i>	<i>Juncus nevadensis</i>
<i>Cardamine rupicola</i>	<i>Juncus tweedyi</i>
<i>Carex aenea</i>	<i>Lemna minuta</i>
<i>Carex brunnescens</i>	<i>Lemna valdiviana</i>
<i>Carex ebenea</i>	<i>Ligusticum verticillatum</i>
<i>Carex jonesii</i>	<i>Lilium philadelphicum</i>
<i>Carex lacustris</i>	<i>Lomatium farinosum</i>
<i>Carex luzulina</i> var <i>atropurpurea</i>	<i>Mimulus suksdorfii</i>
<i>Carex microglochin</i>	<i>Navarretia divaricata</i>
<i>Carex microptera</i> var <i>crassinervia</i>	<i>Oenothera elata</i> ssp <i>hirsutissima</i>
<i>Carex stramineiformis</i>	<i>Oxalis stricta</i>
<i>Carex torreyi</i>	<i>Pediocactus simpsonii</i>
<i>Castilleja crista-galli</i>	<i>Penstemon caryi</i>
<i>Castilleja pilosa</i> var <i>longispica</i>	<i>Penstemon flavescens</i>
<i>Castilleja rustica</i>	<i>Penstemon montanus</i> var <i>idahoensis</i>
<i>Chrysothamnus linifolius</i>	<i>Physaria saximontana</i> var <i>dentata</i>
<i>Claytonia cordifolia</i>	<i>Potentilla concinna</i> var <i>macounii</i>
<i>Collomia debilis</i> var <i>camporum</i>	<i>Rubus arcticus</i>
<i>Cordylanthus capitatus</i>	<i>Selaginella densa</i> var <i>standleyi</i>
<i>Cryptogramma cascadiensis</i>	<i>Senecio debilis</i>
<i>Cymopterus hendersonii</i>	<i>Senecio hyperborealis</i>
<i>Cymopterus terebinthinus</i>	<i>Sphaeromeria capitata</i>
<i>Delphinium bicolor</i> ssp <i>calicicola</i>	<i>Stellaria simcoeii</i>
<i>Delphinium burkei</i>	<i>Stipa lemmonii</i> var <i>lemmonii</i>
<i>Delphinium geyeri</i>	<i>Stipa thurberiana</i>
<i>Draba daviesiae</i>	<i>Synthyris canbyi</i>
<i>Draba lonchocarpa</i> var <i>exigua</i>	<i>Synthyris missurica</i>
<i>Draba</i> sp 1	<i>Tillaea aquatica</i>
<i>Elatine americana</i>	<i>Townsendia nuttallii</i>
<i>Eleocharis bella</i>	<i>Townsendia spathulata</i>
<i>Eleocharis flavescens</i>	<i>Tradescantia bracteata</i>
<i>Equisetum</i> x <i>ferrissii</i>	<i>Verbena bipinnatifida</i>
<i>Equisetum</i> x <i>trachyodon</i>	<i>Viburnum opulus</i>
<i>Erigeron allocotus</i>	<i>Viola palustris</i>
<i>Erigeron coulteri</i>	<i>Viola pedatifida</i>
<i>Eriogonum chrysocephalum</i>	<i>Viola septentrionalis</i>

Preliminary List of Bryophyte Species of Special Concern in Montana

The conservation status of bryophytes in Montana is poorly known. The paucity of collection information hampers determination of rarity, extinction risks, and special protection needs. Nevertheless, we can set preliminary standards for ranking that are analogous to vascular plant rankings, and set priorities for information needs accordingly.

The following list of mosses is based on a state floristic compilation prepared for the U.S. Forest Service and subsequent evaluation (Elliott 1995). It includes species with highly specialized habitat requirements, species which have not been collected for over 70 years, and other species which have been not been collected more than three times in the state, including the most recent additions to the state flora. We have applied state rank definitions for mosses as follows:

<u>State Rank</u>	<u>Definition</u>
S1	Potentially critically imperiled because of both species and habitat rarity (3 or fewer collections and highly restriction to rare habitat)
S2	Potentially imperiled because of both species rarity and habitat rarity (20 or fewer collections and highly restricted to rare habitat)
SH	Historically known only from records before 1925; may be rediscovered
SU	Unknown (3 or fewer collections but collection label information is incomplete or habitat restrictions and habitat rarity are too poorly known to rank the species)

Work is underway to enter location records for moss elements based on existing collections; however, county of distribution information is not available at this time. Major Montana bryophyte collections are available for reference at the University of Montana and the Missoula Resource Center Herbarium of the U.S. Forest Service Intermountain Research Station. Moss collectors are encouraged to follow the format of the Montana Plant Species of Special Concern reporting form, and to submit information to MTNHP.

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ALOINA BREVIROSTRIS	POTTIACEAE	G3G5	SH
AMBLYODON DEALBATUS	MEESIACEAE	G3G5	SH
BARTRAMIA STRICTA	BARTRAMIACEAE	G?	S1
BRACHYTHECIUM REFLEXUM	BRACHYTHECIACEAE	G4G5	SH
BRACHYTHECIUM TURGIDUM	BRACHYTHECIACEAE	G3G5	S1
BRYUM CALOBRYOIDES	BRYACEAE	G3	SH
BRYUM CALOPHYLLUM	BRYACEAE	G?	SH
BRYUM LONCHOCaulon	BRYACEAE	G?	S1
BRYUM PALLENS	BRYACEAE	G4G5	S1
BRYUM SCHLEICHERI	BRYACEAE	G?	S1
CALICLADIUM HALDANIANUM	HYPNACEAE	G5	SH
CALLIERGON RICHARDSONII	AMBLYSTEGIACEAE	G3G4	S1
CALLIERGON TRIFARIUM	AMBLYSTEGIACEAE	G5	S1
CALLIERGONELLA CUSPIDATA	AMBLYSTEGIACEAE	G5	S1
CATOSCOPIUM NIGRITUM	CATOSCOPIACEAE	G4G5	S1
CINCLIDIUM STYGIUM	MNIACEAE	G5	S1
CRUMIA LATIFOLIA	POTTIACEAE	G4	S1
CYNODONTIUM TENELLUM	DICRANACEAE	G?	SH
DENDROALSIA ABIETINA	CRYPHAEACEAE	G4	SH
DESMATODON CERNUUS	POTTIACEAE	G3G5	SH
DESMATODON HEIMII	POTTIACEAE	G5	SH
DICHODONTIUM OLYMPICUM	DICRANACEAE	G?	S1
DICRANELLA GREVILLEANA	DICRANACEAE	G?	S1

MONTANA NATURAL HERITAGE PROGRAM
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Species Name	Family	G Rank	S Rank
ALOINA BREVIROSTRIS	POTTIACEAE	G3G5	SH
AMBLYODON DEALBATUS	MEESIACEAE	G3G5	SH
BARTRAMIA STRICTA	BARTRAMIACEAE	G?	S1
BRACHYTHERCIUM REFLEXUM	BRACHYTHERCIACEAE	G4G5	SH
BRACHYTHERCIUM TURGIDUM	BRACHYTHERCIACEAE	G3G5	S1
BRYUM CALOBRYOIDES	BRYACEAE	G3	SH
BRYUM CALOPHYLLUM	BRYACEAE	G?	SH
BRYUM LONCHOCaulon	BRYACEAE	G?	S1
BRYUM PALLENS	BRYACEAE	G4G5	S1
BRYUM SCHLEICHERI	BRYACEAE	G?	S1
CALICLADIUM HALDANIANUM	HYPNACEAE	G5	SH
CALLIERGON RICHARDSONII	AMBLYSTEGIACEAE	G3G4	S1
CALLIERGON TRIFARIUM	AMBLYSTEGIACEAE	G5	S1
CALLIERGONELLA CUSPIDATA	AMBLYSTEGIACEAE	G5	S1
CATOSCOPIUM NIGRITUM	CATOSCOPIACEAE	G4G5	S1
CINCLIDIUM STYGIUM	MNIACEAE	G5	S1
CRUMIA LATIFOLIA	POTTIACEAE	G4	S1
CYNODONTIUM TENELLUM	DICRANACEAE	G?	SH
DENDROALSIA ABIETINA	CRYPHAEACEAE	G4	SH
DESMATODON CERNUUS	POTTIACEAE	G3G5	SH
DESMATODON HEIMII	POTTIACEAE	G5	SH
DICHODONTIUM OLYMPICUM	DICRANACEAE	G?	S1

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Moss Species of Special Concern

Species Name	Family	G Rank	S Rank
DICRANELLA GREVILLEANA	DICRANACEAE	G?	S1
DICRANELLA HETEROMALLA	DICRANACEAE	G?	S1
DICRANOWEISIA CIRDATA	DICRANACEAE	G4	S1
DICRANUM ACUTIFOLIUM	DICRANACEAE	G?	S1
DICRANUM FRAGILIFOLIUM	DICRANACEAE	G4G5	S1
DICRANUM SPADICEUM	DICRANACEAE	G?	S1
DIDYMODON FALLAX VAR REFLEXUS	POTTIACEAE	G5T5?	S1
DIDYMODON VINEALIS VAR BRACHYPHYLLUS	POTTIACEAE	G5T?	S1
DISTICHUM INCLINATUM	DITRICHACEAE	G4G5	S1
EUCLADIUM VERTICILLATUM	POTTIACEAE	G5	S1
EURHYNCHIUM PULCHELLUM VAR BARNESII	BRACHYTHECIACEAE	G5T?	S1
FABRONIA PUSILLA	FABRONIACEAE	G?	S1
FISSIDENS FONTANUS	FISSIDENTACEAE	G5	S1
FUNARIA AMERICANA	FUNARIACEAE	G2G3	SH
GRIMMIA BRITTONIAE	GRIMMIACEAE	G?	SH
GRIMMIA INCURVA	GRIMMIACEAE	G4G5	S1
GRIMMIA MOLLIS	GRIMMIACEAE	G3G5	S1
HERZOGIELLA TURFACEA	HYPNACEAE	G4G5	S1
HYGROAMBLYSTEGIUM NOTEROPHILUM	AMBLYSTEGIACEAE	G4	S1
HYGROHYPNUM COCHLEARIFOLIUM	AMBLYSTEGIACEAE	G?	S1
KIAERIA BLYTTII	DICRANACEAE	G5	S1
KIAERIA FALCATA	DICRANACEAE	G5	S1

MONTANA NATURAL HERITAGE PROGRAM
Moss Species of Special Concern

Species Name	Family	G Rank	S Rank
KIAERIA STARKEI	DICRANACEAE	G5	S1
MEESIA LONGISETA	MEESIACEAE	G3G4	S1
MEESIA TRIQUETRA	MEESIACEAE	G5	S1
MEESIA ULIGINOSA	MEESIACEAE	G5	S1
MIELICHHOFERIA MACROCARPA	BRYACEAE	G?	S1
MYURELLA TENERRIMA	PTERIGYNANDRACEAE	G2G3	S1
NECKERA DOUGLASII	NECKERACEAE	G4	S1
NECKERA PENNATA	NECKERACEAE	G5	S1
OLIGOTRICHUM ALIGERUM	POLYTRICHACEAE	G5	S1
ORTHOTRICHUM PRAEMORSUM	ORTHOTRICHACEAE	G?	S1
OXYSTEGUS TENUIROSTRIS	POTTIACEAE	G5	SH
PALUDELLA SQUARROSA	MEESIACEAE	G3G5	S1
PARALEUCOBRYUM ENERVE	DICRANACEAE	G?	S1
PARALEUCOBRYUM LONGIFOLIUM	DICRANACEAE	G5	S1
PHYSCOMITRIUM HOOKERI	FUNARIACEAE	G2G4	SH
PLAGIOBRYUM DEMISSUM	BRYACEAE	G?	S1
PLAGIOBRYUM ZIERI	BRYACEAE	G3G4	S1
PLATYHYPNIDIUM RIPARIOIDES	BRACHYTHECIACEAE	G5	S1
POHLIA DRUMMONDII	BRYACEAE	G3G4	S1
POHLIA OBTUSIFOLIA	BRYACEAE	G?	S1
POHLIA VEXANS	BRYACEAE	G?	SH
POLYTRICHUM LYALLII	POLYTRICHACEAE	G?	S1

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Species Name	Family	G Rank	S Rank
POROTRICHUM BIGELOVII	THAMNOBRYACEAE	G4	S1
PSEUDOCALLIERGON TURGESCENS	AMBLYSTEGIACEAE	G3G5	S1
PTYCHOMITRIUM GARDNERI	PTYCHOMITRIACEAE	G4	S1
RACOMITRIUM AQUATICUM	GRIMMIACEAE	G?	S1
SARMENTHYPNUM SARMENTOSUM	AMBLYSTEGIACEAE	G4G5	S1
SCHISTOSTEGA PENNATA	SCHISTOSTEGACEAE	G4G5	S1
SCORPIDIUM SCORPIOIDES	AMBLYSTEGIACEAE	G4G5	S1
SELIGERIA DONNIANA	SELIGERIACEAE	G4G5	S1
SPHAGNUM CENTRALE	SPHAGNACEAE	G5	S1
SPHAGNUM COMPACTUM	SPHAGNACEAE	G5	S1
SPHAGNUM CONTORTUM	SPHAGNACEAE	G5	S1
SPHAGNUM FALLAX	SPHAGNACEAE	G5	S1
SPHAGNUM FIMBRIATUM	SPHAGNACEAE	G5	S1
SPHAGNUM GIRGENSOHNII	SPHAGNACEAE	G5	S1
SPHAGNUM MAGELLANICUM	SPHAGNACEAE	G5	S1
SPHAGNUM MENDOCINUM	SPHAGNACEAE	G4	S1
SPHAGNUM PLATYPHYLLUM	SPHAGNACEAE	G5	S1
SPHAGNUM RIPARIUM	SPHAGNACEAE	G5	S1
SPHAGNUM SUBNITENS	SPHAGNACEAE	G5	S1
STEGONIA LATIFOLIA	POTTIACEAE	G?	S1
TAYLORIA ACUMINATA	SPLACHNACEAE	G3G4	SH
TAYLORIA LINGULATA	SPLACHNACEAE	G3G5	S1

MONTANA NATURAL HERITAGE PROGRAM
Moss Species of Special Concern

Species Name	Family	G Rank	S Rank
TAYLORIA SERRATA	SPLACHNACEAE	G5	S1
TETRAPLODON ANGUSTATUS	SPLACHNACEAE	G3?	S1
THAMNOBRYUM NECKEROIDES	THAMNOBRYACEAE	G?	SH
TORTULA MURALIS	POTTIACEAE	G5	S1
TORTULA NORVEGICA	POTTIACEAE	G5	S1
TORTULA PAPILLOSA	POTTIACEAE	G5	S1
TRACHYBRYUM MEGAPTILUM	BRACHYTHECIACEAE	G4	S1
WARNSTORFIA EXANNULATA	AMBLYSTEGIACEAE	G5	S1

96 Taxa

New Botany Reports and Publications

Listed below are botany reports and publications which were produced through the Montana Natural Heritage Program or the Montana Field Office of The Nature Conservancy over the past year as of May, 1996. Complete lists of MTNHP botany literature are available, as are botanical reference search services by geographic area, by species, or by select keywords. In addition, a complete bibliography of Montana reports and reports of all Heritage Programs in the West can be found on our site on the Internet (<http://nris.mt.gov>).

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- Ahlenslager, K. and P. Lesica. 1996. Observations of *Botrychium x watertonense* and its putative parent species, *B. hesperium* and *B. paradoxum*. American Fern Journal 86(1):1-7.
- Heidel, B. L. 1995. Piedmont Swamp Botanical Site evaluation, Jefferson County, MT. Unpublished report. Montana Natural Heritage Program. 30 pp. plus appendices.
- Heidel, B. L. and H. Marriott. 1996. Sensitive plant species survey of the Ashland District, Custer National Forest, Powder River and Rosebud counties, MT. Unpublished report to the U.S. Forest Service. Montana Natural Heritage Program. 94 pp. plus app. (*Agastache foeniculum*, *Amorpha canescens*, *Astragalus barrii*, *Carex grvida*, *Carex torreyi*, *Ceanothus herbaceus*, *Cypripedium calceolus*, *Dichanthelium oligosanthos scribnerianum*, *Elatine americana*, *Evax prolifera*, *Geum canadense*, *Ipomopsis congesta pseudotypica*, *Mentzelia nuda*, *Sphenopholis obtusata major*)
- Heidel, B. L. and J. S. Shelly. In progress. The effects of fire on *Penstemon lemhiensis*, 1995 monitoring establishment report. Unpublished report to Beaverhead National Forest and Bureau of Land Management. Montana Natural Heritage Program, Helena.
- Heidel, B. L. and J. Vanderhorst. 1996. Sensitive plant surveys in Beaverhead and Madison counties, MT. Unpublished report to the Bureau of Land Management. Montana Natural Heritage Program, Helena. 85 pp. plus appendices. (*Astragalus platytropis*, *Astragalus scaphoides*, *Astragalus terminalis*, *Erigeron linearis*, *Kochia americana*, *Lesquerella pulchella*, *Lomatium attenuatum*, *Oryzopsis contracta*, *Phacelia scopulina*, *Stephanomeria spinosa*, *Taraxacum eriophorum*, *Townsendia nuttallii*)
- Heidel, B. L. 1996. New additions to the Montana flora. Draft manuscript. 10 pp.
- Lesica, P. 1995. Conservation status of *Castilleja longispica* on Custer and Gallatin National Forests, Montana. Unpublished report to the U.S.D.A. Forest Service Region One, Missoula, MT. Montana Natural Heritage Program. 44 pp. plus appendices.
- Lesica, P. 1995. Conservation status of *Haplopappus carthamoides* var. *subsquarrosus* in Montana. Unpublished report to the U.S. Forest Service and the U.S. Bureau of Land Management. Montana Natural Heritage Program. 22 pp. plus appendices.
- Lesica, P. 1995. Conservation status of *Lesquerella lesicii* in Montana. Unpublished report to the U.S. Forest Service and the Bureau of Land Management. Montana Natural Heritage Program. 16 pp. plus appendices.

- Lesica, P. 1995. Demography of *Astragalus scaphoides* and effects of herbivory on population growth. *Great Basin Nat.* 55(2):142-150.
- Lesica, P. 1995. Monitoring *Silene spaldingii* on Dancing Prairie Preserve: 1995 progress report. The Nature Conservancy, Helena, MT. 17 pp.
- Lesica, P. 1995. The effects of fire on *Silene spaldingii* at Dancing Prairie Preserve, 1995 progress report. The Nature Conservancy, Helena, MT. 17 pp.
- Lesica, P. and K. Ahlenslager. 1996. Demography and life history of three sympatric species of *Botrychium* subg. *Botrychium* in Waterton Lakes National Park, Alberta. *Can. J. Bot.* 538-543. (*Botrychium hesperium*, *B. paradoxum*, *B. x watertonense*)
- Lesica, P. and B. Heidel. 1996. Pollination biology of *Silene spaldingii*. Unpublished report to The Montana Field Office of Nature Conservancy. 16 pp.
- Lesica, P. and J. S. Shelly. 1995. Effects of reproductive mode on demography and life history in *Arabis fecunda* (Brassicaceae). *American Journal of Botany* 82(6): 752-762.
- Lesica, P. and J. Vanderhorst. 1995. Sensitive plant survey of the Sage Creek area, Beaverhead County, Montana. Unpublished report to the Bureau of Land Management. Montana Natural Heritage Program. 36 pp. plus appendices. (*Astragalus terminalis*, *Calochortus bruneaunis*, *Carex parryana idaho*, *Eriogonum caespitosum*, *Halimolobos virgata*, *Primula incana*, *Sphaeralcea munroana*, *Sphaeromeria argentea*, *Thelypodium sagittatum*, *Thlaspi parviflorum*, *Townsendia florifer*, *Townsendia nuttallii*)
- Montana Natural Heritage Program. 1995. Characterization abstracts: plant species of potential concern to the Bureau of Land Management in Montana. Unpublished report.
- Shelly, J. S. and B. L. Heidel. 1995. Demographic monitoring of *Penstemon lemhiensis* in southwest Montana - final report. Unpublished report to the Beaverhead National Forest and the Bureau of Land Management. Montana Natural Heritage Program. 26 pp. plus appendices.
- Shelly, J. S. and J. Gamon. 1996. *Howellia aquatilis* (Water Howellia) recovery plan. Unpublished report to the U. S. Fish and Wildlife Service. vi. plus 52 pp.
- Shelly, S. 1995. Eccentric aquatic. *Kelseya* Newsletter article reprinted in *American Horticulturalist* 74(11):11. (*Howellia aquatilis*)
- Vanderhorst, J. 1996. Status report on Sensitive lady's slipper orchids (*Cypripedium calceolus* var. *parviflorum* and *Cypripedium passerinum*) on the Kootenai National Forest. Unpublished report to the Kootenai National Forest. Montana Natural Heritage Program. 27 pp. plus appendices.
- Vanderhorst, J. 1996. Status report on sensitive moonworts (*Botrychium* subg. *Botrychium*) on the Kootenai National Forest. [draft]. Montana Natural Heritage Program. 64 pp. plus appendices. (*Botrychium ascendens*, *B. crenulatum*, *B. minganense*, *B. montanum*, *B. paradoxum*)

